

## THE EFFECT OF MACROECONOMIC INDICATORS AND GOVERNANCE AS DEMAND FACTORS ON TAX RATIO

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**Abstract:** This study aims to complement the many studies on the tax ratio (tax ratio) in supply factors. In addition to knowing the effect of supply factors on the tax ratio, this study was conducted to determine the impact of demand factors on the tax ratio managed by the DGT at the provincial level. The supply factors in this study include macroeconomic variables and economic structure (GRDP of the Agricultural Sector). Meanwhile, the demand factors in this study include the quality of governance implementation, income inequality, and fiscal decentralisation. The research method used is quantitative research by utilising panel data. The results show that the variables of economic growth, income inequality, and voice hurt the tax ratio. The economic structure variables (agricultural sector GDP) and unemployment rate affect the tax ratio positively. The fiscal decentralisation, accountability, and inflation rate variables do not affect the tax ratio.

**Keywords:** Demand Factors, Macroeconomics, Province, Tax Ratio, Supply Factors.

**Abstrak:** Penelitian ini bertujuan untuk melengkapi banyaknya penelitian mengenai tax ratio (rasio pajak) dari sisi supply factors. Selain untuk mengetahui pengaruh supply factors terhadap rasio pajak, penelitian ini dilakukan untuk mengetahui pengaruh demand factors terhadap rasio pajak pusat yang dikelola oleh DJP pada tingkat provinsi. Adapun supply factors dalam penelitian ini mencakup variabel makroekonomi dan struktur ekonomi (PDRB Sektor Pertanian). Sedangkan demand factors dalam penelitian ini mencakup kualitas pelaksanaan tata kelola pemerintahan, ketimpangan pendapatan, dan desentralisasi fiskal. Metode penelitian yang digunakan adalah penelitian kuantitatif dengan memanfaatkan kombinasi data berupa data panel yang dapat disebut sebagai data panel. Hasil penelitian ini yakni variabel pertumbuhan ekonomi, ketimpangan pendapatan, 'voice/ suara' berpengaruh negatif terhadap rasio pajak. Sedangkan variabel struktur ekonomi berupa (PDRB sektor pertanian) dan tingkat pengangguran berpengaruh positif terhadap rasio pajak. Adapun variabel desentralisasi fiskal, akuntabilitas dan tingkat inflasi tidak berpengaruh terhadap rasio pajak.

**Kata Kunci:** Demand Factors, Makroekonomi, Provinsi, Rasio Pajak, Supply Factors.

## **INTRODUCTION**

In this section, the author must respond "what is meant by the results obtained and claimed as research findings". This section is the part that seems easy to write, but is the hardest part to get it right and this is the most important part of an article. Most of the manuscripts received serious attention from editors and reviewers because the discussion was weak, and many were even returned for re-submission or rejected. Tax revenue is one of the most critical things in economic development. Adequate financial resources are needed to develop public infrastructure development, education provision, health service improvement, strengthening state security, and other forms of national development (Kalloub et al., 2020; Murunga, 2016). Moreover, taxes have more than 80% of Indonesian total state revenues each year since 2015. Tax revenues are expected to contribute 81.8% of total state revenues in the 2022 APBN posture as an essential instrument in generating income and mobilising resources in Indonesia.

As one of the essential components in implementing a nation's economic development, the performance of tax revenues needs to be monitored. One indicator to assess the performance of tax revenues is the tax ratio or tax ratio (Lubis, 2018). According to the OECD, the tax ratio can indicate an increase in rupiah tax revenue due to increased Gross Domestic Product (GDP) (Kemenkeu, 2019). Although there are several indicators to measure tax performance, the tax ratio is a measure that is considered capable of providing an overview of the taxation conditions in a region/country (Kemenkeu, 2019). Understanding the various conditions in collecting taxes is very important because many countries struggle to collect taxes as optimally as possible. To date, these conditions can be explained by several factors related to the tax ratio, including economic growth, trade, economic structure, corruption, accountability, and other similar factors (van Oordt, 2019). Furthermore, literature on tax ratios is needed to help understand why one society can collect more tax revenues than another (Lotz & Morss, 1967).

Several studies related to tax ratios show that several factors affect tax ratios in several countries. Research in Kenya with data samples taken from 1980 to d. 2015 shows that GDP per capita, GDP of agriculture, and services significantly affect the tax ratio (Murunga, 2016). The research of Dalamagas et al. (2019), carried out in 30 countries from 1995 to 2015, shows that macroeconomic indicators (GDP and purchasing power) significantly impact tax ratios. On the other hand, research conducted by Bird et al. (2014) in Latin America shows that in addition to supply factors that are widely used as conventional model variables (GDP per

capita, population growth, economic structure, and the ratio of exports – imports to GDP), demand factors (in the form of the role of government institutions) also have a significant influence on the tax ratio. From the results of the study, it can be concluded that not only does economic activity (supply factors) play a role in influencing the tax ratio, but there is also the role of community institutions that represent the voice of the community (especially taxpayers) in influencing a country (demand factors) (Bird et al., 2014).

Bird et al. (2014) use the terms supply and demand factors to categorise the tax ratio variables. Supply factors are related to economic activities carried out by a country, while demand factors are correlated with people's motivation to contribute to the country. Piancastelli & Thirlwall (2021) added that supply factors could be interpreted as capacity, while demand factors can be interpreted as willingness to pay taxes. It means if a country has sufficient capacity ('capacity' can be measured by the variable of income per capita and the economic structure of a country), but the willingness/willingness to contribute to taxes is low, it will cause the tax ratio to be low (Piancastelli & Thirlwall, 2021). There are several variables mentioned by Bird et al. (2014) in supply factors, one of which is macroeconomic variables and economic structure. Oueslati (2014) states that any changes in the macroeconomy can affect tax revenues. Therefore, the government seeks to maintain constant and increasing tax revenues and consistently strives to maintain stable macroeconomic conditions. Among these macroeconomic variables, economic growth is one factor that significantly affects tax revenue (Drummond et al., 2012). Economic growth, associated with Gross Domestic Product (GDP) growth, significantly contributes to tax revenue. Conducive economic conditions can trigger economic performance, increase the activities of business actors and increase the level of public consumption.

As a result, tax revenues will increase (Boediono, 2003; Tamara, 2009). A different impact is shown by the unemployment rate and inflation on the tax ratio. The Treasury, Australian government (undated) states that high unemployment reduces tax revenue and negatively impacts the government's ability to generate revenue. Meanwhile, rising inflation decreased purchasing power and hampered economic growth, reducing tax revenues. On the other hand, the sectoral composition of domestic products in the economic structure can also affect collecting tax revenues (Bird et al., 2014). Bird et al. (2014) state that three sectors are difficult to tax, including the MSME sector, the service sector, and the agricultural sector. In

conclusion, the higher the GDP Non-Agricultural, the higher the tax ratio generated (Bird et al., 2014). In addition, demand factors affect people's willingness to contribute to tax revenue (Bird et al., 2014). In demand factors, government institutions are used as indicators to measure how people have a voice in influencing the state. If the taxpayers/community feel that their interests (preferences) are well represented in government institutions and perceive that the government is running well, then there is a tendency for the community to comply with their tax obligations. The term government agency in demand factors has a broad meaning. Bird et al. (2014) mention that government institutions are related to policymaking, governance, corruption, and income distribution.

The quality of governance implementation is measured through the Quality of Governance Index (Kaufmann et al., 2003), which has six dimensions of governance values, including dimensions of voice and accountability, dimensions of political stability, dimensions of government effectiveness, dimensions of regulatory quality, dimensions of the rule of law, and dimensions of controlling corruption. Of the six dimensions, one dimension that can be measured is voice and accountability. The voice dimension was chosen because, in general, government institutions and the community have a role in administering the government. Specifically, voice is the ability of the community to express their views and influence the governance process, including demands for transparency and accountability (Sharma, 2008). In contrast, accountability is related to the relationship between the community and the government, where the community can hold the government accountable (Sharma, 2008). Both voice and accountability are closely related. Voice and accountability come together to the point where those who exercise the 'voice' of society by seeking accountability (Sharma, 2008).

In addition to governance, fiscal decentralisation policy is also related to the tax ratio. The tax ratio is potentially influenced by the vertical structure of Government (Bird et al., 2014), including the implementation of fiscal decentralisation. Fiscal decentralisation is a form of delegation of authority from the Central Government to Regional Governments in managing finances. The local government is given the authority to explore the potential of regional income under the applicable laws and regulations. The source of regional income is expected to encourage regions to finance their expenses independently (Hasan, 2020). In principle, the fiscal decentralisation policy aims to reduce the dependence of local governments on the central government so that local governments can achieve their independence so that the goal of

autonomy is achieved (Hasan, 2020). Fiscal decentralisation in Indonesia officially came into effect on January 1, 2001, beginning with the ratification of Law No. 22/1999 on Fiscal Balance between Central and Regional Governments. The fiscal decentralisation policy allows local governments to manage their finances independently to support the implementation of regional autonomy (Hasan, 2020). In addition, Livingstone & Charlton (1998) argue that the decentralisation of government and government finances is an important goal so that local governments can get closer to the community and know their needs to provide services according to the community's needs. As a result, people will be aware of paying their tax obligations because the amount they contribute to the government will immediately see the results (Livingstone & Charlton, 1998).

Maximising the fiscal decentralisation that government institutions can carry out can affect economic growth in Indonesia (Handoko & Syofyan, 2014). With the trade-off between economic growth and income inequality, the government is expected to focus on the right policies to spur economic growth by paying attention to the pattern of income distribution in society (Handoko & Syofyan, 2014). Income inequality, inequality in the distribution of wealth and income, is closely related to the public's view of how well the fiscal system addresses social goals concerning equity, social justice, and redistribution (Bird et al., 2014). If the distribution of the tax burden that is considered unfair is considered one of the causes of income inequality, the result may be lower levels of trust in institutions and ultimately lower tax ratios due to increased tax avoidance (Bird et al., 2014). In short, unequal distribution of income and wealth tends to reduce tax payments. Therefore, there is a hypothesis that higher inequality leads to lower levels of tax effort (Bird et al., 2014).

From the explanation above, it is known that there have been several empirical studies that previously tested the factors that affect the tax ratio. However, most research is still conventional, focusing on supply factors. There are still few studies that expand the conventional model research by involving demand factors. Research involving demand factors shows that in addition to economic activity that can affect tax revenue capacity, people's motivation to increase tax revenue also has an important role. Taxpayers feel that their interests (preferences) are well represented in government institutions and assume that the government is running well, then there is a tendency for the community to comply with their tax obligations (Bird et al., 2014). These factors are still not much research done. The importance of knowing

the demand factors that affect the tax ratio can encourage the government to improve the performance of its government institutions to represent the aspirations of the people better so that people can better comply with their tax obligations. In addition, research on the factors that affect the tax ratio is only conducted on the population between countries. There are still few studies that examine the factors that affect the tax ratio in Indonesia, especially on a smaller regional scale at the provincial level. Research at the provincial level is expected to provide more representative inputs regarding the factors affecting policymakers' tax ratio. Based on this explanation, the author is interested in researching the influence of supply and demand at the provincial level in Indonesia.

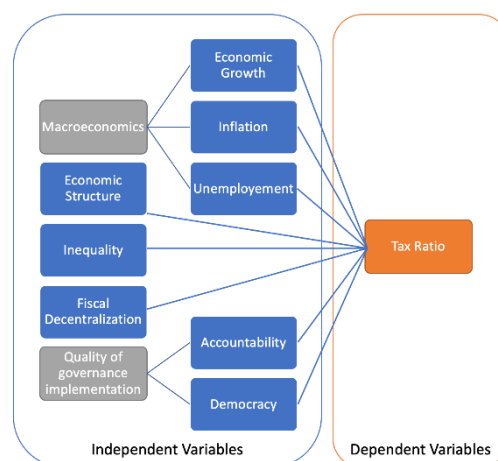
## **METHOD**

The type of research used is quantitative research that aims to determine the relationship between the independent variable and the dependent variable in a population or sample used in a study. According to (Creswell & Poth, 2018), quantitative research is a study that uses an approach to test the objective theory by testing the relationship between variables. These variables can be measured to analyse quantitative data using statistical procedures. This study utilises a combination of data in time series and cross-section data, which can be referred to as panel data (Basuki & Prawoto, 2017). According to (Sekaran & Bougie, 2017), data can be obtained from primary and secondary sources. Primary data is data/information obtained directly from the first hand by researchers, while secondary data is data/information collected from existing sources (Sekaran & Bougie, 2017). The data used in this study are secondary data obtained from the Directorate General of Taxes, the Central Statistics Agency, and the Supreme Audit Agency.

The data collected in this study used a sampling technique in non-probability sampling. Sugiyono (2017) states that Nonprobability Sampling is a sampling technique that does not provide equal opportunities for each member of the population to be selected as a sample. While the sampling technique used is the saturated sampling technique. The saturated sampling technique is part of the Nonprobability Sampling design. According to Sugiyono (2017), the saturated sampling technique is a technique for determining a sample where all population members are used as samples. The saturated sampling technique method is used when the population is relatively small. In addition, the saturated sampling technique is used to make generalisations with relatively small errors. This research was conducted in 34 provinces in

Indonesia with a study period of five years. Therefore, this study uses panel data. Panel data combines cross-section and time-series data (Basuki & Prawoto, 2017). Cross-section data is observation data from several observation units at one time. Meanwhile, time-series data consists of variables observed in one unit of observation in a certain period.

In the beginning, it is necessary to analyse the data. According to Sugiyono (2017), data analysis is carried out after all data has been collected and processed into information. Furthermore, changes are made to the characteristics of the data to be understood and helpful in answering problems related to research. After analysing the data, the hypothesis is tested using panel data regression estimation by choosing the best model between the Common Effect Model, Fixed Effect Model, or Random Effect Model. This research is motivated by the importance of tax revenue for the economic development of the Indonesian state. DGT needs to optimise tax revenues so that the needs of APBN revenues can be met maximally and to avoid excessive dependence on foreign financing, which can lead to a debt trap in the long term. By considering each province's economic conditions and characteristics, it is hoped that the DGT will be able to formulate tax revenue targets more effectively and efficiently. Therefore, the researcher developed a framework of thought based on the theory and logic of the researcher as follows:



**Figure 1** Conceptual Framework

This study was conducted to determine the effect of the independent variables on the quality of governance implementation, fiscal decentralisation, income inequality, economic structure, and macroeconomic variables on the tax ratio as the dependent variable. The primary research model in this study is as follows:

$$TR_i = \alpha_1 + \beta_1 GDP + \beta_2 AGR + \beta_3 UER + \beta_4 VOC + \beta_5 ACN + \beta_6 FD + \beta_7 INE + \beta_8 INF + \epsilon_1$$

Note:

TR<sub>i</sub> = tax ratio

GDP = Regional GDP

UER = unemployment rate

VOC = voice

ACN = accountability

FD = fiscal decentralization

INE = inequality

AGR = economic structure (agriculture)

INF = inflation

## RESULTS

### Statistic Descriptive

The descriptive statistical analysis results of the dependent and independent variables in this study are shown in Appendix. The variable tax ratio is one indicator to assess the performance of tax revenues (Lubis, 2018). The higher the tax ratio, the better the performance in collecting taxes (Sari & Mulyati, 2018). The variable of the tax ratio is expressed in decimal for the nominal tax revenue to GRDP at current prices at the provincial level. The tax ratio variable has an average value of 0.031633, where there are 20 provinces whose annual average tax ratio for five years is below the average value, the average value is 0.029448, the minimum value is 0.012021 owned by Lampung Province in 2019, and a maximum value of 0.091973 owned by DKI Jakarta Province in 2017.

The accountability variable is one indicator that an institution adheres to Good Governance Government. Moreover, it is represented by providing an opinion on the government's financial statements conducted by the BPK. Furthermore, it is expressed in quantifying the fairness of the information according to the opinion given by the BPK. Quantification of the fairness of the information is expressed in the form of a percentage. The accountability variable has an average of 0.983824 (98.38%), the median value is 1.0000 (100%), the maximum value is 1.0000000 (100%), which indicates that the province with that value has a WTP opinion (fair Without Exception) on the related Regional Government Financial Reports (LKPD), the minimum value is 0.750000 (75%) which indicates that the



province with this value has a WDP (Worth with Exception) opinion on the related LKPD. The provinces that have received WDP opinions include: Bengkulu Province, Bangka Belitung Islands, DKI Jakarta, Banten, Maluku, North Maluku and West Kalimantan.

The fiscal decentralisation variable is one of the factors that can increase regional fiscal capacity (BPK, 2020). The calculation of the Fiscal Independence Index is used to measure the fiscal capacity of the region. The fiscal decentralisation variable has an average value of 0.367919. It means that the average ability to finance regional expenditures using the PAD (Regional Original Income) of the provincial Government is 36.79%, where there are still 17 provinces with an average Fiscal Independence Index lower than the national average. The minimum value of the fiscal decentralisation variable is 0.042700 (4.27%) owned by the Province of Papua in 2019. While the maximum value of the variable of fiscal decentralisation is 0.761100 (76.11%) owned by the DKI Jakarta Province in 2015. The median value of the fiscal decentralisation variable is 0.361250 (36.125%). The Democracy Index proxy represents the variable voice. This variable is an indicator of ensuring that the community can channel their voice or aspirations (Kemenkopolkukam, 2020). The Democracy Index is expressed as a percentage and has an average value of 0.733345 (73.33%), which is included in the moderate category, where 16 provinces have an annual average score lower than the national average. The maximum value of the Democracy Index of 0.882900 (88.29%), which is included in the excellent category, is owned by the DKI Jakarta province in 2019, while the minimum value of the Democracy Index is 0.544100 (54.41%), which is included in the category wrong, owned by West Sumatra in 2016. The median value of the Democracy Index was 0.734450 (73.44%), which was included in the medium category.

The income inequality variable is related to the distribution of people's income in a country. Income inequality causes the gap between people with relatively good economic levels and those with low incomes to get bigger (Amri, 2017). To measure the occurrence of income inequality, BPS uses the Gini ratio. The Gini ratio is expressed in decimal with an average value of 0.358091. There are 15 provinces whose average Gini ratio is above the national average, which indicates that these provinces tend to experience inequality in income distribution. The Province of D.I Yogyakarta owns the maximum value of the Gini ratio of 0.436000 in 2017. In addition, the minimum value of the Gini ratio of 0.266 is owned by the Province of the Bangka Belitung Islands in 2019. The median value of the income inequality

variable is 0.355000. The economic growth variable in Indonesia is calculated based on GRDP at constant (real) prices. The real GRDP can be used to show the overall economic growth rate or based on each business field from year to year. The variable of economic growth is expressed in per cent with an average value of 0.052457 (5.24%). This means that the provinces in Indonesia experience an average growth of 5.24% annually. There are 14 provinces whose average growth rate is below the national average. The maximum value of economic growth is 0.217578 (21.76%) owned by West Nusa Tenggara Province in 2016, while Papua Province owned the minimum value of -0.157156 (-15.71%) in 2018. The median value of the economic growth variable is 0.053196 (5.32%).

In this case, the variable of economic structure, the GRDP of the agricultural sector, affects the ability to collect taxes. Bird (2014) states that the higher the Non-Agricultural GDP, the higher the tax ratio generated. The economic structure variable (agricultural sector GDP) is expressed in per cent with an average value of 0.139857 (13.98%). There are 14 provinces where the average value of GRDP in the agricultural sector is greater than the national average percentage. The economic structure of these provinces, in general, is still dominated by the agricultural sector. While the maximum value of GRDP in the agricultural sector of 0.308415 (30.84%) was owned by the Province of West Sulawesi in 2016, the Province of DKI Jakarta owned the minimum value 0.000438 (0.0004%) in 2019.

The median value of the variable economic structure of 0.130833 (13.08%). The unemployment rate variable, expressed in per cent, has an average value of 0.049549 (4.95%). It means that the average unemployment rate in the province is 4.95%. Fourteen provinces have an average unemployment rate that exceeds the national average. The maximum value of this variable is 0.090650 (9.065%), owned by Banten Province in 2016. While Bali Province owned the minimum value of 0.011400 (1.14%) in 2018. The median value of the unemployment rate variable is 0,043975 (4.40%) The inflation rate variable, expressed in decimal, has an average value of 0.032102. It means that the average inflation rate in the province is 4.95%. Nineteen provinces have an average inflation rate that is less than the national average. The maximum value of this variable is 0.077800, which Bangka Belitung Province owned in 2016. At the same time, Maluku Province owned the minimum value of -0.0005 in 2017. The median value of the inflation rate variable is 0.031000.

## Hypothesis Testing Results

**Table 1** Fixed Effect Model (FEM) with Cross-Section Weights

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACN	0.001439	0.003671	0.392023	0.6957
AGR	0.090484	0.021575	4.194006	0.0001
FD	0.004078	0.004321	0.943800	0.3471
GDP	-0.012445	0.004993	-2.492315	0.0140
INE	-0.047134	0.014007	-3.364988	0.0010
INF	-0.008065	0.011461	-0.703646	0.4829
UER	0.101465	0.024329	4.170588	0.0001
VOC	-0.018054	0.003854	-4.684450	0.0000
C	0.042065	0.007298	5.763999	0.0000
R-squared	0.983951			
Adjusted R-squared	0.978811			
F-statistic	191.4102			
Prob(F-statistic)	0.000000			

Based on the results of data processing and analysis, it can be seen that:

### Economic Growth

The hypothesis test results show that the probability value of the variable economic growth (GDP) is 0.00700 with a t-statistic value of -2.492315. These results can be interpreted that the variable economic growth hurts the tax ratio. One of the contributing factors is the role of MSMEs in economic growth in the regions (provinces). MSMEs are the pillars of the national economy and the spearhead of the regional economy. With the increasing role of MSMEs in the regional economy, the regional economy has multiplied. However, economic growth that is not matched by increased tax revenues in the MSME sector has worsened the tax ratio.

### Unemployment

The hypothesis test results show that the probability value of the unemployment rate (UER) is 0.00005 with t-Statistic value of 4.170588. These results can be interpreted that the unemployment rate positively affects the tax ratio. The increase in the unemployment rate makes the production/output of goods and services decrease, thus declining economic growth. In line with the results of this study, declining economic growth makes the tax ratio increase. The implication is that the increase in the unemployment rate increases the tax ratio.

### Inflation

The hypothesis test results indicate that the probability of inflation (INF) is 0.24145 with t-Statistic value of -0.703646. These results can be interpreted that inflation does not affect the tax ratio. Inflation causes people's purchasing power to decrease, especially people with low incomes. However, the impact of inflation is not felt by high-income people. They can still buy things because of their consumptive nature. As a result, it does not affect tax revenues and tax ratios.

### **Economic Structure**

The hypothesis test results indicate that the probability value of the economic structure (GDP of the Agricultural Sector) (AGR) is 0.00005 with a t-Statistic value of 4.194006. These results can be interpreted that the greater the GRDP of the Agricultural Sector, the higher the tax ratio. One of the positive contributions of the GRDP of the agricultural sector is the success of the GNP SDA program initiated by the KPK. The program can increase tax revenue in the agricultural sector to positively affect the tax ratio.

### **Inequality**

The hypothesis test results show that the probability value of the income inequality variable (INE) is 0.0014 with the t-Statistic value of -3.270777. These results indicate that income inequality hurts the tax ratio. Inequality lowers the taxation base, thereby lowering tax revenues and tax ratios.

### **Fiscal Decentralisation**

The hypothesis test results indicate that the probability value of fiscal decentralisation (FD) is 0.17355 with a t-Statistic value of 0.943800. Based on these results, it can be said that fiscal decentralisation does not affect the tax ratio in each province in Indonesia. This is due to the decentralised form of fiscal decentralisation in that expenditures are decentralised, where local governments are given the authority to regulate their spending, but the authority to levy local taxes and regional retributions is still relatively limited. In general, local governments in Indonesia still depend on transfer revenues from the central government to finance expenditures. One component of the transfer of income from the central government is the Revenue Sharing Fund. The principle of distribution of Revenue Sharing Funds is based on the realisation of state revenues divided into actual revenues in the current fiscal year. However, the small proportion of central tax revenue shared at the provincial level makes the provincial

government less motivated to increase central tax revenue. As a result, the implementation of fiscal decentralisation does not affect the tax ratio.

### **Accountability**

The hypothesis test results indicate that the probability value of the accountability structure (ACN) is 0.34785 with a t-statistic value of 0.34785. It shows that the level of accountability (ACN) does not affect the tax ratio in each province in Indonesia. It is due to the accountability aspect contained in the quality of governance implementation that only focuses on the financial management side of local government. It is not enough to show the accountability aspects of governance more broadly and comprehensively. Public curiosity about government accountability cannot be satisfied only by financial performance accountability information. The public wants to know more about whether the government they have chosen operates efficiently, economically, and effectively. In conclusion, the accountability aspect does not affect the tax ratio.

### **Voice**

The hypothesis test results indicate that the probability value of the voice variable (VOC) is 0.0000 with a t-Statistic value of -4.506738. Although the trend of the democracy index is increasing from year to year, there are still various problems in the field. IDI data shows that there are still threats and violence that shackles the press and silences freedom of expression in the community and the poor performance of representative institutions causes the 'voice' of the community to be still not able to influence the administration of government. It will impact the public's poor perception of the performance of local governments as an extension of the central government. The public has the perception that if the performance of the local government is less than optimal, then the trust in the local government in particular and the government, in general, has not been maximised. Therefore, people's motivation to contribute to tax revenue is still minimal.

### **CONCLUSION**

Most of the research is still conventional and still focuses on supply factors. There are still few studies that expand the conventional model research by involving demand factors. Research involving demand factors shows that in addition to economic activity that can affect tax revenue capacity, people's motivation to increase tax revenue also has an important role. It means that if taxpayers/society feel that their interests (preferences) are well represented in

government institutions and assume that the government is running well, then there is a tendency for the community to comply with their tax obligations (Bird et al., 2014). These factors are still not much research done. The importance of knowing the demand factors that affect the tax ratio can encourage the government to improve the performance of its government institutions to represent the aspirations of the people better so that people can better comply with their tax obligations. However, the results in this study show the opposite. The Voice variable, which represents demand factors, especially in terms of democracy in governance, shows an unfavourable result on the tax ratio. IDI data shows that there are still threats and violence that shackles the press and silences freedom of expression in the community and the poor performance of representative institutions causes the 'voice' of the community to be still not able to influence the administration of government. It will impact the public's poor perception of the performance of local governments as an extension of the central government. The public has the perception that if the performance of the local government is less than optimal, then the trust in the local government in particular and the government, in general, has not been maximised. Therefore, people's motivation to contribute to tax revenue is still minimal.

The same thing is shown by economic growth and income inequality variables. The results showed that these variables harmed the tax ratio. However, the variables of the unemployment rate and GRDP of the agricultural sector show a positive effect on the tax ratio. Meanwhile, the inflation rate, fiscal decentralisation, and accountability variables do not affect the tax ratio. The limitation of this study is that this study uses the inflation rate in each provincial capital to represent the provincial inflation rate due to the absence of regional inflation rate data in the province during the study period. Theoretically, the results of this study can be used as reference material for further research related to the tax ratio. Practically, the results of this study can be used as a reference and material for consideration in making policies regarding macroeconomics and governance related to tax ratios.

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